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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/732,811	12/11/2003	Takashi Fukuda	041283-0307179	5893
909	7590	03/08/2005	EXAMINER	
PILLSBURY WINTHROP, LLP			TRIEU, THERESA	
P.O. BOX 10500				
MCLEAN, VA 22102			ART UNIT	PAPER NUMBER
			3748	

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/732,811	Applicant(s) FUKUDA ET AL.	
	Examiner Theresa Trieu	Art Unit 3748	

ED

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-11 and 16 is/are pending in the application.
- 4a) Of the above claim(s) 12-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6,10,11,16 is/are rejected.
- 7) ☒ Claim(s) 7-9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/11/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Receipt and entry of Applicants' Preliminary Amendment filed on December 1, 2004 is acknowledged.

This Office Action is responsive to the applicants' election filed on December 1, 2004.

Claims 1, 6, 7 and 10 have been amended. Claim 5 has been canceled. Thus, claims 1-4, 6-11, and 16 are pending in this application.

#### ***Election/Restrictions***

1. Applicants' election with traverse of the species of Figures 1-2, claims 1-4, 6-11 and 16 being readable thereon is also acknowledged. The traversal is on the ground(s) that the additional search and examination of the entire application can be conducted without a serious burden. This is not found persuasive because the claims recite several limitations which are mutually exclusive to the different species as noted by the examiner in the Restriction Requirement mailed on November 1, 2004. Specifically, the "Oldham ring (5a), key member (5c, 5d)" contained in Figures 3-10 is not contained in Figures 1-2. The search required for the species of Figures 3-10 required an additional search in class/subclass 418/55.3 and 464/102. Examining all of these numerous distinct features of the entire application would place a serious burden on the Examiner. The search required for any one of the species would not be required for the remaining species.

Accordingly, the requirement is still deemed proper and is therefore made FINAL.

Claims 12-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. ***Claims 1-4, 6, 10, 11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujiwara et al. (Fujiwara) (Patent Number 6,345,825) in view of Yamamoto et al. (Yamamoto) (Patent Number 5,314,321).***

Regarding claims 1, 4, 6, 10, 11 and 16, as shown in Fig. 1, as shown in Fig. 1, Fujiwara discloses a fluid machinery comprising a helical compressor including a cylinder (5) in which a sliding mechanism comprising a roller (11) and helical blade (15) is arranged; a driving unit

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connected to the helical compressor; and Oldham ring provided for preventing a revolution of the roller (11) of the sliding mechanism; the sliding mechanism comprising one side member composed, in combination, of a aluminum alloy metallic base member (11) having a sliding surface and a lubrication film (see col. 8, line 42-44) formed on the sliding surface, and a counterpart side (15) member containing fluorocarbon resin (see col. 10, line 63; col. 11, line 45-48); the solid lubricant contains at least one selected from the group consisting of boron nitride (see col. 9, line 15-25); the sliding member mechanism being operated under a condition without lubricant oil supply; and the sliding mechanism comprising a movable seal unit (15) slidable in contact to a component of the fluid machinery. However, Fujiwara fails to disclose the lubrication film including a solid lubricant and a binder of resin material.

Regarding claims 1 and 16, Yamamoto teaches that it is conventional in the fluid machinery art to utilize the lubricant film including solid lubricant and a binder of resin material (see abstract – see col. 3, line 40-54). With regard claim 2 and 3, Yamamoto discloses the resin material for the binder comprises epoxy resin or polyamideimide resin (see col. 3, line 50-54). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the combination of the solid lubricant and resin material, as taught by Yamamoto in the Fujiwara apparatus, since the use of thereof would have reduced noise level during operation of the machine and improved the mechanical strength.

*Allowable Subject Matter*

3. Claims 7-9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Prior Art*

The IDS (PTO-1449) filed on December 11, 2003 has been considered. An initialized copy is attached hereto.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of four patents: Takeuchi et al. (U.S. Patent Number 5,573,390), Shiinoki et al. (U.S. Patent Number 6,142,755), Kenji (Publication Number JP 62-199982), Yasunobu et al. (Publication Number JP 02-201072), Hisanori et al. (Publication Number JP 02-291491), and Kairiku (Publication Number JP 08-276451), each further discloses a state of the art.

*Communication*


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa Trieu whose telephone number is 571-272-4868. The examiner can normally be reached on Monday-Friday 8:30am- 5:00pm. The new telephone number is 571-272-4868 that will become effective after November 22, 2004.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E Denion can be reached on 571-272-4859. The new telephone number is 571-272-4859 that will become effective after November 22, 2004. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TT

  
Theresa Trieu  
Primary Examiner  
Art Unit 3748